IN THE SPECIFICATION

The paragraph beginning at page 3, line 19 has been amended as follows:

This object is achieved in accordance with the invention by a method wherein the resonator segments are temporally sequentially excited using different excitation parameter sets within an excitation sequence. The excitation parameter sets should ~~thereby exhibit~~ cause phase distributions of the nuclear magnetization distributions in the examination volume ~~that~~ to constructively overlap ~~into~~ so as to form a resulting (at least predominantly) homogeneous overall nuclear magnetization distribution. Constructive overlapping means that the nuclear magnetization (which is synonymous with the flip angle) is additively built up in steps at each location of the examination volume with each further excitation pulse that ~~are characterized~~ is caused to be emitted by the different excitation parameter sets[[,]], in order to ultimately obtain the desired overall nuclear magnetization that can be achieved in the framework of the concrete experimental possibilities with corresponding precision, thus the at least largely homogeneous total nuclear magnetization. An essentially equal phase distribution of the nuclear magnetization or of the flip angle in the examination volume is a requirement for the possibility of the constructive (thus additive in steps) superimposition of the sequentially-applied excitation pulses that exhibit different excitation parameter sets. An essentially identical (i.e. in the framework of the concrete, experimental possibilities with corresponding precision) phase distribution of the resulting flip angle of the precessing nuclear magnetization in the examination volume thus results.

The paragraph beginning at page 10, line 20 has been amended as follows:

The magnetic resonance system also comprises a body coil 7 (also known as a whole-body antenna) that normally accords a double function. It serves as a transmission antenna for field generation and as a reception antenna for acquisition of signals. The body coil 7 can be activated by the control and evaluation device 5 such that corresponding excitation currents flow in it according to the excitation parameters as they exist in the control and evaluation device 5.

The paragraph beginning at page 11, line 27 has been amended as follows:

Fig. 3 shows the inventive temporally-sequential activation mode ~~as it is inventively proposed~~ as a ~~principle~~ schematic representation. The time axis is plotted; an entire excitation cycle is shown (characterized by the start and end points in time t_0 and t_n) that is sub-divided into n time windows. At a point in time t_0 the excitation of the resonator segments of the body coil (as Fig. 2 shows it) is implemented with a first excitation parameter set S1. The duration of this sub-pulse excitation is relatively short and ends at a point in time t_1, after which the excitation is continued using a different excitation parameter set S2 that leads to a similar field homogeneity as the parameter set S2, however is based on different excitation parameters. The sub-pulse S2 is applied up to the point in time t_2, after which the excitation parameter set S3 is switched to, which excitation parameter set S3 forms the basis of the excitation. In this manner the excitation continues using respective different excitation parameter sets up to the usage of the last parameter set Sn that forms the basis of the excitation at the point in time t_n, after which the excitation is ended altogether.